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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,018	06/06/2007	Wiro Joep Niessen	NL 040294	3168
24737 7590 12/27/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER SONG, HOON K	
			ART UNIT 2882	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary

Application No.

10/599,018

Applicant(s)

NIESSEN ET AL.

Examiner

Hoon Song

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/27/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6 and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (US 2004/0105526A1).

Regarding claims 1 and 9, Zhang teaches an X-ray examination apparatus or method for acquiring X-ray image data of a region of interest, comprising:

an imaging unit comprising an X-ray source (12) for emitting X-ray radiation and an X-ray detector (22) for detecting X-ray radiation after penetration of said region of interest,

processing means (28) for determining a desired position of said imaging unit, at which X-ray image data shall be acquired, based on a predetermined image acquisition plan and/or an actual position of an instrument (23),

control means (18) for determining position parameters of said imaging unit for said desired position, and

positioning means (motor) for positioning said imaging unit at said desired position by use of said position parameters (figure 1).

Regarding claim 2, Zhang teaches said positioning means comprises automatic position control means for automatically positioning said imaging unit at said desired position (paragraph 44).

Regarding claim 6, Zhang teaches said processing means comprise a calibration means for calibrating said imaging unit with said predetermined image acquisition plan and/or said instrument (paragraph 6).

Regarding claim 8, Zhang said desired position determines a desired plane or projection to be visualized, in particular with respect to said instrument or with respect to pre-acquisitioned 3D image data (figure 1).

Claims 1, 3-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Simon et al. (US 6920347B2).1

Regarding claims 1 and 9, Simon teaches an X-ray examination apparatus or method for acquiring X-ray image data of a region of interest, comprising:

an imaging unit comprising an X-ray source (214) for emitting X-ray radiation and an X-ray detector (216) for detecting X-ray radiation after penetration of said region of interest,

processing means (110) for determining a desired position of said imaging unit, at which X-ray image data shall be acquired, based on a predetermined image acquisition plan and/or an actual position of an instrument,

control means (226) for determining position parameters of said imaging unit for said desired position, and

positioning means (e.g. operating personnel) for positioning said imaging unit at said desired position by use of said position parameters (figure 1).

Regarding claim 3, Simon teaches said positioning means (operating personnel) comprises manual position control means for manually positioning said imaging unit at said desired position, a position check means (displayed position of the marker 222) for checking if the desired position has been reached (navigation), a signaling means (figure 4) for signaling if the desired position has been reached and/or how the desired position can be reached, and a tracking means 222 for tracking the actual position of said imaging unit.

Regarding claim 4, Simon teaches tracking means for tracking the actual position of said instrument 125 and said imaging unit 210, wherein said control means are operative for determining said position parameters by use of the tracked position of said instrument (figures 3-4).

Regarding claim 6, Simon teaches said processing means comprise a calibration means 540 for calibrating said imaging unit with said predetermined image acquisition plan and/or said instrument.

Regarding claim 7, Simon teaches said imaging unit further comprises a C-arm on which said X-ray source and said X-ray detector mounted (figure 2).

Regarding claim 8, Simon said desired position determines a desired plane or projection to be visualized, in particular with respect to said instrument or with respect to pre-acquisitioned 3D image data (figures 2 and 4).

Claims 1-2, 5 and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmitt (US 20030108154A1).

Regarding claims 1-2, 5 and 8-9, Schmitt teaches an X-ray examination apparatus or method for acquiring X-ray image data of a region of interest, comprising:

an imaging unit comprising an X-ray source for emitting X-ray radiation and an X-ray detector for detecting X-ray radiation after penetration of said region of interest,

processing means for determining a desired position of said imaging unit, at which X-ray image data shall be acquired, based on a predetermined image acquisition plan and/or an actual position of an instrument,

control means for determining position parameters of said imaging unit for said desired position, and

positioning means for positioning said imaging unit at said desired position by use of said position parameters (see international search report, PCT/IB2005/050876).

Claims 1-2 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Suhm (US 6491429B1).

Regarding claims 1-2 and 4-9, Suhm teaches an X-ray examination apparatus or method for acquiring X-ray image data of a region of interest, comprising:

an imaging unit comprising an X-ray source for emitting X-ray radiation and an X-ray detector for detecting X-ray radiation after penetration of said region of interest,

processing means for determining a desired position of said imaging unit, at which X-ray image data shall be acquired, based on a predetermined image acquisition plan and/or an actual position of an instrument,

control means for determining position parameters of said imaging unit for said desired position, and

positioning means for positioning said imaging unit at said desired position by use of said position parameters (see international search report, PCT/IB2005/050876).

Claims 1-2, 5, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Herrmann (US 20020099284A1).

Regarding claims 1-2, 5, 7 and 9, Herrmann teaches an X-ray examination apparatus or method for acquiring X-ray image data of a region of interest, comprising:

an imaging unit comprising an X-ray source for emitting X-ray radiation and an X-ray detector for detecting X-ray radiation after penetration of said region of interest,

processing means for determining a desired position of said imaging unit, at which X-ray image data shall be acquired, based on a predetermined image acquisition plan and/or an actual position of an instrument,

control means for determining position parameters of said imaging unit for said desired position, and

positioning means for positioning said imaging unit at said desired position by use of said position parameters (see international search report, PCT/IB2005/050876).

Conclusion

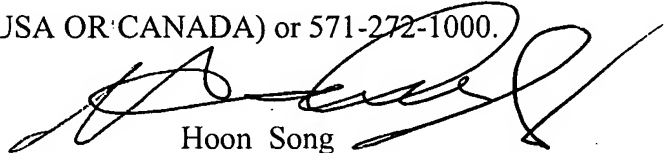
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494. The examiner can normally be reached on 9:30 AM - 7 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Hoon Song
Primary Examiner
Art Unit 2882